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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,877	02/19/2004	Peter Kochersperger	1857.2140000	1990

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1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

DUONG, KHANH B

ART UNIT	PAPER NUMBER
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2822

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03/17/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/780,877	Applicant(s) KOCHERSPERGER, PETER	
	Examiner KHANH B. DUONG	Art Unit 2822	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12, 14 and 23-29 is/are pending in the application.
- 4a) Of the above claim(s) 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12, 14 and 23-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This office action is responsive to the amendment filed December 17, 2009.

Accordingly, claim 12 was amended. Claims 1-11, 13, 16-22 were previously canceled.

Claim 15 (depends on canceled claim 13) remains withdrawn from further consideration as being directed to a non-elected invention.

Currently, claims 12, 14 and 23-29 are active.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12, 14, 23, 24 and 26-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Getchel et al. (U.S. Patent No. 6,375,176).

Re claim 12, Getchel et al. (“Getchel”) expressly discloses in FIG.’s 9A and 11A wafer holder structure comprising: (a) a wafer chuck 533 (of cast aluminum); and (b) an expandable annular tube 580 coupled to the wafer chuck 533. Since the wafer holder structure recited by Getchel is substantially identical to that of the claim, it is inherent that the wafer chuck 533 is configured to receive a wafer, and the expandable annular tube 580 is configured to expand the wafer chuck 533 without substantially expanding the wafer, such that an inherent initial stress at an interface between the wafer and the wafer chuck 533 is created, wherein the expandable annular tube 580 is sealed (e.g. to prevent fluid leakage, etc.). See *MPEP 2112.01*.

In reference to the recitation “[a] lithography system configured to reduce wafer slipping”, such limitation has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88USPQ 478 (CCPA 1951).

In addition, in reference to the claim languages referring to the functions of the device, i.e., “configured to receive a wafer”, “configured to expand the wafer chuck without substantially expanding the wafer, such that an inherent initial stress at an interface between the wafer and the wafer chuck is created”, “to be pressurized” and “configured to expand to in turn expand the wafer chuck when pressurized”, intended use and other types of functional language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, and then it meets the claim. *In re Casey*, 152 USPQ 235 (CCPA 1967); *In re Otto*, 136 USPQ 458, 459 (CCPA 1963); *Ex parte Masham*, 2USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). In the instant case and as explained above, Getchel shows all structural limitations specifically recited in the claim and it appears that the recited functional limitation does not affect the structure of Getchel. Furthermore, labels statements of intended use, or functional language do not structurally distinguish claims over prior art, which can function in the same manner, be labeled in the same manner, or be used in the same manner. See *MPEP 2112.01*.

Re claim 14, Getchel expressly discloses in the same figures said annular tube 580 is coupled to an outer edge of said wafer chuck 533.

Re claim 23, in reference to the claim language referring to the functions or intended use of the device, i.e., “configured to expand said wafer chuck in a uniform manner”, see discussion above regarding claim 12.

Re claim 24, since Getchel expressly discloses in FIG. 11A the use of the annular tube 580 as a heat sink, it is inherent that the annular tube 580 comprises a metal which is a material for effective heat transfer.

Re claim 26, Getchel discloses said annular tube 580 includes a cavity, and wherein the cavity is configured to be filled with one of a fluid (e.g. liquid) [see col. 17, lines 61-65].

Re claim 27, Getchel discloses a temperature sensor coupled to the wafer chuck [see col. 7, lines 19-24].

Re claim 28, in reference to the claim language referring to the functions or intended use of the device, i.e., “configured to releasably secure or hold the wafer by vacuum clamping”, see discussion above regarding claim 12.

Re claim 29, in reference to the claim language referring to the functions or intended use of the device, i.e., “configured to releasably secure or hold the wafer by electrostatic clamping”, see discussion above regarding claim 12.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Getchel.

Re claim 25, Getchel does not disclose the annular tube 580 comprises a plastic.

It would have been obvious to one having an ordinary skill in the art at the time the invention was made to use plastic for the annular tube, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Response to Arguments

Applicant's arguments filed December 17, 2009 have been fully considered but they are not persuasive.

Applicant persistently argues that Getchel does not teach or disclose a system configured to reduce wafer slipping, and an expandable annular tube that is sealed to be pressurized and configured to expand to in turn expand the wafer chuck when pressurized.

In response, the Examiner respectfully disagrees because the recitation “[a] system configured to reduce wafer slipping” has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim following the preamble

is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88USPQ 478 (CCPA 1951).

In addition, in reference to the claim languages referring to the functions of the device, i.e., “to be pressurized” and “configured to expand to in turn expand the wafer chuck when pressurized”, intended use and other types of functional language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, and then it meets the claim. *In re Casey*, 152 USPQ 235 (CCPA 1967); *In re Otto*, 136 USPQ 458, 459 (CCPA 1963); *Ex parte Masham*, 2USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). In the instant case and as explained above, Getchel shows all structural limitations specifically recited in the claim and it appears that the recited functional limitation does not affect the structure of Getchel. Furthermore, labels statements of intended use, or functional language do not structurally distinguish claims over prior art, which can function in the same manner, be labeled in the same manner, or be used in the same manner. See *MPEP 2112.01*.

Furthermore, Applicant argues that Getchel does not mention an “expandable” annular tube that is configured to expand “under pressure” to cause expansion of the wafer chuck to which it is coupled. In response, while it is generally agreed that the circulating tubes 580 of Getchel are being used to cool the wafer chuck 533, it is entirely possible that the same circulating tube 580 (e.g. made of a metal material) can be expanded if subjected to certain critical pressure and temperature ranges.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHANH B. DUONG whose telephone number is (571) 272-1836. The examiner can normally be reached on Monday to Friday from 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith, can be reached on (571) 272-2429. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2822

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/K. B. D./

Examiner, Art Unit 2822

/Zandra V. Smith/

Supervisory Patent Examiner, Art Unit 2822